PUBLIC AND PRIVATE INSTITUTIONS.

Ohio Wesleyan university, Delaware, O.

Additions to the museum. — The increase to the collections for the year amounts to 9,202 specimens. The aim of the curator is not to build up a great museum, but one of great educational value, which shall in time contain every specimen needed to explain the facts of natural history as presented in the text-books of the department. All purchases and solicited exchanges are for this end, and even the volunteer exchanges are turned in this direction as far as practicable. W. F. Falconer has given an extensive collection made at the phosphate beds of Charleston, S.C. An elephant's tooth in this collection measures ten by fourteen inches, and weighs twenty-nine pounds.

Prof. R. E. Call of Nebraska, a most enthusiastic naturalist, spent the summer of 1882 on a collecting trip through Georgia. The museum joined with other institutions in defraying his expenses, and sharing the results. Although all the material has not been distributed, over five thousand specimens have been received, and a large number of new and valuable species.

The U. S. fish-commission has presented a collection illustrating the marine fauna of the New England coast. It contains nearly one hundred species, many of which were obtained by dredging at depths as great as two hundred fathoms.

Collections of importance have also been received from the late Mr. C. R. McClellan, a former assistant, and from Revs. J. M. Barker of Mexico, and H. Mansell of India, and the Brothers Willis, recently returned from a tour of the world.

The shelves in all the cases are overcrowded; and at least twenty-five thousand specimens are packed away in boxes and drawers, awaiting study, and room in which to display them. The erection of one or more new cases is required.

NOTES AND NEWS.

The summer courses of instruction in chemistry, offered to teachers by Harvard university, opened July 6, in the chemical laboratories of Boylston hall, and will continue six weeks. The course in general and descriptive chemistry is taken by twelve persons, the course in qualitative analysis by ten, and quantitative analysis by five. There are also eight persons who are engaged on advanced quantitative analysis, organic chemistry, and original research. Lectures are given twice a week on general chemistry, daily on qualitative analysis, and twice a week on quantitative analysis. The laboratories are open daily from 8 A.M. to 6 P.M. The following states are represented: Maine, Massachusetts, New York, New Jersey, Ohio, Illinois, Michigan, Minnesota, Nebraska, and Georgia. Of the thirty-five persons mentioned above, five are women, and eight are continuing their work from former courses. As in previous years, these courses are under the direction of Dr. C. F. Mabery.

— Upon the death of Charles Darwin, last year, the advocates of evolution in the Paris anthropological society organized a *Conférence annuelle transformiste*, in which one of their number who is a specialist shall set forth the manner in which the doctrine of transformism has affected his department of research, and also the arguments which his studies have furnished for the substantiation of the doctrine. The opening lecture of the course was delivered by M. Mathias Duval, upon the mutual relations of evolution and the embryology of the eye, and is published in the *Revue scientifique* for May 12. The first part of the discussion is an attack upon the doctrine of special creation and final causes. It does not seem to have come to the notice of our French colleagues, that the doctrine of special creation, like all other doctrines (evolution, for instance), has modified itself from time to time by the increase of knowledge. "These admirable appropriations of an organ to an end," says M. Duval, "are explained by the gradual perfecting of a mechanism, which, setting forth from simple and elementary adjustments, develops, by heredity and selection, the forms that are more and more advantageous to the individual. Upon the question whether embryology confirms this theory, it is proposed to examine the successive forms which the eye presents in the animal series, and the successive stages of its development in man or the higher vertebrates. In other words, the phylogeny will first be questioned, and afterward the ontogeny, of the *globe oculaire*, to see whether these two series of facts are a repetition the one of the other." Briefly passing over the unicellular forms, and those in which the eye is undifferentiated, the author commences his more special investigation with the tunicates and amphioxus, from which point the argument is conducted with great precision, and is well illustrated.

— The French academy of sciences proposed as a subject for one of its 1882 prizes the following: "To find the origin of the electricity of the atmosphere, and the causes of the great development of electrical phenomena in storm-clouds." Several memoirs were received by the academy; but no one of them was adjudged worthy of the prize, although a reward and encouragement of a thousand francs was granted to one of the competitors. The academy, therefore, continues the above as one of the prize subjects for 1885. Memoirs will be received up to June 1, 1885. Each must be accompanied by a sealed envelope containing the name and address of the author. The envelope will not be opened unless the memoir is successful. The value of the prize is three thousand francs.

— The sixth annual convention of American librarians will be held in Buffalo, Aug. 14 to 17. The opening address will be delivered by the president, Justin Winsor. Excursions will be made down the Niagara River, and, at the close of the session, to Niagara Falls. Further details may be obtained from Mr. John N. Larned, Young men's library, Buffalo.

— The Smithsonian institution will soon publish

Professor Bolton's Catalogue of scientific and technical periodicals. Proof-sheets have been sent to the leading libraries of the country, with the request that it should be noted what journals might be on their shelves; so that we shall have a complete list of available scientific periodicals.

— The Johns Hopkins university circular for June is given up to a statement of the work of the past year, and a programme of the courses offered for the year 1883-84.

— According to *Nature*, the emperor of Austria, on June 5, inaugurated the new Vienna observatory on the Turken Schanze, in the northern outskirts of the town. The new building has taken nine years to construct; and during that time the present director has travelled all over Europe and America in order to study the construction and equipment of the best observatories. The result is, that the Vienna observatory is probably one of the most complete in existence.

— Dr. Ph. Paulitschke's work on the '*Geographische erforschung des afrikanischen continents*' (Vienna, 1880), in which he gave a brief statement of the work of all explorers from ancient times down to the date of publication, is now supplemented by his '*Afrika-literatur in der zeit von 1500 bis 1750 n. Chr.*' (Vienna, 1882), — a work of 122 pages, with 1,212 titles. Valuable cartographic aid to study in the same direction is given in H. Kiepert's maps of the progress of African exploration from 1750 to 1873, and of the expeditions of this century, colored according to their nationality; these being published in the journal of the Berlin geographical society in 1873 and 1874, and again in the ten larger scale charts of inner Africa by Petermann and Hassenstein, issued as a supplement to the *Miltheilungen* in 1863.

— Mr. W. G. Black is preparing the index for his Folk-medicine, already in print, and to be issued immediately by the Folk-lore society. The work treats of the origin and communication of disease, and the influence in folk-medicine of charms, saints, and heavenly bodies.

The same society hopes soon to obtain for publication a collection of Zulu nursery literature, which has been in the hands of Bishop Callaway for ten years. This will be an addition to folk-lore of very great interest and value.

RECENT BOOKS AND PAMPHLETS.

Adrian, T. Ueber projectivitäts- und dualitäts-beziehungen im gebiete mehrfach unendlicher kegelschnittschaaren. Berlin, 1882. 54 p. 8°.

Ambühl, G. Anleitung zur milchprüfung. St. Gallen, *Huber*, 1883. 43 p. 8°.

Amunátegui, M. L. El terremoto del 13 mayo de 1647. Santiago de Chile, 1883. 620 p. 4°.

Ballard, H. H. Hand-book of the St. Nicholas Agassiz association. Pittsfield, *Axtell & Pomeroy, pr.*, 1882. 5+85 p. 24°.

Barron, A. F. Vines and vine-culture: being a treatise on the cultivation of the grape-vine, with description of the principal varieties. London, 1883. 240 p., illustr. 8°.

Bastian, A. Volkerstämme am Brahmaputra und verwandtschaftliche nachbarn. Berlin, *Dümmlers*, 1883. 70+130 p., 2 col. pl. 8°.

Béchamps. Les microzymas dans leurs rapports avec l'héterogénie, l'histogénie, la physiologie et la pathologie. Paris, 1883. 8°.

Behrend, G. Eis- und kälteerzeugungs-maschinen, nebst einer anzahl ausgeführter anlagen zur erzeugung von eis, abkühlung von flüssigkeiten und räumen. Halle, 1883. 8°.

Bersch, J. Die verwerthung des holzes auf chemischem wege. Die fabrikation von oxalsäure, alkohol und cellulose, der gerbstoff- und farbstoff-extracte aus rinden und hölzern, der ätherischen oele und harze. Wien, 1883. 368 p., illustr. 8°.

Bleunard, A. Le mouvement et la matière. Lectures sur la physique et la chimie. Paris, 1883. 374 p., illustr. 8°.

Branco, W., und **Reiss,** W. Ueber eine fossile säugethierfauna von Punin bei Riobamba in Ecuador. Mit geologischer einleitung. Berlin, 1883. 166 p. gr. 4°.

Brown, J. E. The forest flora of South Australia. part i. London, 1883. pl. f°.

Buccola, G. La legge del tempo nei fenomeni del pensiero; saggio di psicologia sperimentale. Milano, *Dumolard*, 1883. *Bibl. intern.* 15+432 p. 8°.

Buckland, F. Log-book of a fisherman and zoölogist. New edit. London, 1883. 352 p., illustr. 8°.

Candolle, A. de. L'origine delle piante coltivate. Milano, 1883. 644 p. 8°.

Cantor, G. Grundlagen einer allgemeinen mannigfaltigkeitslehre, mathematisch-philosophischer versuch in der lehre des unendlichen. Leipzig, *Teubner*, 1883. 51 p. 8°.

Cerón, S. Estudio sobre los materiales y efectos usados en la marina. Cádiz, 1883. 652 p., illustr. 4°.

Congresso geografico internazionale terzo tenuto a Venezia dal 15 al 22 settembre, 1881. vol. i. Notizie e rendiconti. Roma, *Soc. geogr. ital.*, 1882. 404 p., pl. 8°.

Cotteau, Peron, et **Gauthier.** Échinides fossiles de l'Algérie. fasc. i. Terrains jurassiques. Paris, 1883. 79 p., illustr. 8°.

Credner, H. Geologische profile durch den boden der stadt Leipzig und deren nächster umgebung. Leipzig, *Hinrichs*, 1883. 5+71 p., pl. f°.

Dawidowsky, F. Fabrication of glue, gelatine, cements, pastes, mucilages, etc. Translated from the German, with additions, by W. T. Braunt. Philadelphia, 1883. 275 p. 12°.

Dodel-Port, A. Illustrirtes pflanzenleben. Gemeinverständliche originalabhandlungen über die interessantesten und wichtigsten fragen der pflanzenkunde. Zürich, 1883. 490 p., illustr. 8°.

Faà di Bruno, F. Théorie des formes binaires. Turin, 1883. illustr. 8°.

Faber, G. L. The fisheries of the Adriatic and the fish thereof, with a systematic list of the Adriatic fauna. Preceded by an introduction by Günther. London, 1883. illustr. 4°.

Falkenburg, C Neue schieberdiagramme und neue theorie der dampfvertheilung in anwendung auf die steuerung der stationären und locomotorischen dampfmaschinen. Leipzig, 1883. 8°.

Faramelli, T. Descrizione geologica della provincia di Pavia, con annessa carta geologica a calori nella scala di 1 per 200,000. Milano, 1882. 104 p. 4°.

Graetz, L. Die elektricität und ihre anwendungen zur beleuchtung, kraftübertragung, metallurgie, telephonie, und telegraphie. Stuttgart, 1883. illustr. 8°.

Gross, V. Les Protohelvètes ou les premiers colons sur les bords des lacs de Bienne et Neuchâtel. Avec préface de Virchow. Berlin, 1883. 120 p., illustr. 4°.

Halphen. Mémoire sur la réduction des équations différentielles linéaires aux formes intégrales. Paris, 1883. 301 p. 4°.

Harting, J. E. Sketches of bird life from 20 years' observations of their haunts and habits. London, 1883. 302 p., illustr. 8°.

Heen, M. P. de. De la dilatabilité de quelques liquides organiques et des solutions salines. Bruxelles, 1883. 51 p., illustr. 8°.

Helderich, T. de. Flore de l'île de Céphalone ou catalogue des plantes, qui croissent naturellement et se cultivent le plus frequemment dans cette île. Lausanne, *Beidel*, 1883. 90 p. 8°.

Hellriegl, H. Beiträge zu den naturwissenschaftlichen grundlagen des Ackerbaues. Braunschweig, 1883. 8°.

Herbert, D., *edit.* Selection from the prize essays of the International fisheries exhibition, Edinburgh, 1882. New York, 1883. illustr. 8°.

Hofmann, E. Der käfersammler. Stuttgart, 1883. illustr. 8°.